

IN THE SPECIFICATION

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03/18/2010 Please amend the portions of the specification identified below to read as indicated herein.

NOTE: The page numbers and line numbers refer to those of the specification as originally filed.

Paragraph beginning at page 5, line 1:

Fig. 2 shows an example method for data cleansing. In step 200, a qualifying field audit is performed. In step 202, addresses are standardized, corrected, and ZIP+4-coded. In step 204, addresses are additionally ~~corrected and categorized with~~ corrected, and marketing-oriented information is appended. In steps 206 and 208, addresses are updated with changed information, when appropriate. In step 210, new addresses are re-processed to verify corrections and add categorization data. In step 212, output is edited to a single best address for each parsed data element along with selected postal codes and the original address. In step 214, the best address is matched to a business information database and, based on appended codes, additional corrections are made available. In step 216, a layout data dictionary with suggestions for leveraging postal data is generated. In general, the example method includes processing domestic addresses including data discovery, postal pre-processing, and, optionally, matching.

Paragraph beginning at page 5, line 15:

Data discovery begins with the pre-audit and includes parsing and reformatting a customer file and verifying that a large number, such as 85% of the records in the customer file have enough address elements to be helped by postal pre-processing. It is verified that there is one address per record. Variations of an address on a single record, i.e., a bill-to and a ship-to, or a street address and a P.O. Box, need to be “exploded” into separate records to be helped by postal processing. It is verified that the data is for the United States only. Different processes are used for foreign data. The pre-audit also includes examining the contents of every field in every record ~~is performed~~, and a report is produced, which applies letter grades to each data element, reflecting completeness and relevance.

Paragraph beginning at page 5, line 26:

~~Postal-In~~ In step 202, postal pre-processing is performed through a combination of processes and matching to multiple USPS-compiled database, such as a database totaling over 280 million domestic records, for corrections. Standardization, correction, and ZIP+4 coding (a/k/a Coding Accuracy Support System, CASS™, processing) are performed for all domestic addresses, business or consumer.

Paragraph beginning at page 6, line 1:

~~Postal-In~~ In step 204, postal pre-processing in this method also includes applying a file to correct records and append codes, such as "good address, but vacant for the last 90 days" and score each record for accuracy and deliverability. One example file is a second generation delivery sequence file (DSF2). The DSF2 is a file containing substantially all valid addresses serviced by the Postal Service. This comprehensive system enables the substantial elimination of undeliverable addresses, allows mailers to obtain additional ~~postage~~, postage discounts, and provides valuable information about the make-up of addresses on files. The DSF2 is updated monthly with transactions supplied by the USPS and has 156 million address records for nearly every deliverable address in the United States.

Paragraph beginning at page 6, line 12:

~~Postal-In~~ In step 206, postal pre-processing also includes utilizing address standardization and DSF2 corrections to match to another file, such as the Locatable Address Conversion System (LACS) file. LACS is a file made available by the United States Postal Service (USPS) that provides access to new, changed addresses for locations that have not moved. The LACS has about 5 million records. The vendor receives monthly updates to the USPS LACS file.

Paragraph beginning at page 6, line 25:

~~Postal~~ In step 208, postal pre-processing also includes utilization of corrected and updated addresses from the preceding steps to match to another file, such as the weekly updated 120-million-record National Change of Address (NCOA) file.

Paragraph beginning at page 6, line 29 (is being partitioned into two paragraphs, and the second of the two paragraphs is being further amended):

The NCOA file is made available by the USPS to provide mailers current change of address information so as to reduce undeliverable mail and increase response rates. This comprehensive system identifies and corrects addressing errors before mail enters the mail stream. A vendor receives updates to the NCOA file every week. NCOA covers four years of moves, with additional possible moves (on near matches to a “from” address) flagged via NCOA-Nixie footnotes. The NCOA has about 120 million records in a rolling four-year database of from- and to-addresses, requiring an almost perfect match to the old name and address to get a new address appended. The NCOA-Nixie flags include a reason code why a new address could not be appended.

~~New~~ In step 210, new addresses generated from NCOA are then reprocessed: first against LACS and then against DSF2. New addresses coming from LACS that were also not NCOA matches are reprocessed against DSF2.

Paragraph beginning at page 7, line 12:

~~Postal~~ In step 212, postal pre-processing results in a set of best address corrections or address updates for each address element. The best address corrections or address updates are appended to the input address, avoiding the creation of a file with multiple and conflicting sets of corrections for each address element as is the common practice from conventional processes.

Paragraph beginning at page 7, line 18:

Optionally, In step 214, the results are matched to another file, such as a 31-million-record advanced office system (AOS) file. A certain number of postal processed records have either failed to be recognized by postal processing, or failed to be completely corrected. For instance, records with missing or wrong suite numbers. Historically, matches, at some level of confidence, are made for 30% to 95% of the records that postal processing determines to be uncorrectable. If such a record is matched to a database, (allowing for a lower confidence match is normally acceptable, because it is already known that the client address is incorrect) and if the user agrees the match is valid, the user has the option to further correct the record by using address elements from the matched record in the database.

Paragraph beginning at page 7, line 29:

An example method of data cleansing provides address correcting and updating service for domestic and global address records using a combination of processes. The domestic method includes the following steps: (1) in step 200, performing a qualifying field audit; (2) in step 202, standardizing, correcting, and ZIP+4 coding address records via CASS-certified software; ~~(2)~~ (3) in step 204, correcting and appending marketing information via DSF; ~~(3)~~ (4) in step 206, updating the address records via USPS LACS; ~~(4)~~ (5) in step 208, updating the address records via USPS NCOA and NCOA-Nixie flagging of possible moves; ~~(5)~~ (6) in step 210, applying NCOA for new addresses from LACS; ~~(6)~~, and applying DSF to NCOA addresses, to make certain all addresses have maximum corrections and appended data; (7) in step 212, editing output to a single best address for each parsed address element, along with selected postal codes, and the address as originally submitted; (8) in step 214, matching the best address to a domestic business database, and, based on appended codes, making additional corrections on records that match to the database; and (9) in step 216, providing a layout or data dictionary with suggestions for leveraging postal data. A project manager initiates a field by field audit and a multi-step standardization, correction, and updating process, preferably in three days or less.

Paragraph beginning at page 9, line 27:

Fig. 3 shows the operation of an example system for data cleansing. In step 300, the program manager documents user requirements. In steps 302 and 304, profiles are created based on user-defined requirements. In step 306, a user input file is received. In step 308, a pre-audit is performed. In step 310, a pre-audit report is generated and made available to others, such as by posting to a website. In step 312, the program manager ~~review and send~~ reviews and sends the report to the user. In step 314, invalid records are separated and put into a separate file, which will be appended to the valid file-is received from a vendor in step 328. In step 316, an order form and other information is sent to the vendor in a separate file, ahead of the data file. In step 318, the vendor processes the information. In step 320, a postal summary report is generated by the vendor and received by the program manager. In step 322, the program manager reviews the results, creates a summary presentation and shares them with others. In step 324, the user reviews the results. In step 326, the file is received from the vendor. In step 328, the invalid record file (from step 314) is combined with the returned vendor file. In step 330, matching and appending is performed. In step 332, a results report is generated and made available to others. In step 334, the program manager generates a project analysis report. In step 336, the program manager reviews the results and sends them to the user. In step 338, it is determined whether an investigation is requested for unmatched records. If so, in step 340, the unmatched records are processed. In step 342, additional results are made available to the user. In step 344, the user receives results as they become available.

Paragraph beginning at page 12, line 3:

The example system includes a ~~pre-auditor~~ pre-auditor, verifies various aspects of the input ~~addresses~~ addresses, and calculates frequency counts for various fields in the records, such as company name, address 1, address 2, address3, address4, city, state, ZIP and country name. The pre-auditor calculates a number of times one of these fields is repeated, and absence counts, presence counts, number of records and the percentage distinct within each field.

Paragraph beginning at page 20, line 5:

The present invention has many advantages. For first class mailers, the user's mail, such as invoices, is forwarded to new addresses when the addressees move, but having the new address in advance saves one to two weeks of delivery time. For standard class (bulk) promotions, more pieces are delivered with more accurate addresses yielding a higher response rate. For all businesses, data cleansing facilitates internal data integration efforts and generates high match rates to other data. Cost savings are realized, depending on the size of the customer list. The present invention is able to determine a correct address and match it to a unique business identifier in a database for u up to 95% of the addresses determined to be uncorrectable by the U.S. Postal Service. The present invention has a database with nearly 19 million marketable U.S. business records and 14 million more in an historical repository. The present invention appends data that is about 98% ZIP+4-coded due to monthly address updating and maintenance routines. For international addresses there are about 41 million marketable records. The matcher may provide an improved address even when postal correction software is unable to.